









Augmented Reality System Designer

QP Code: CSC/Q0410

Version: 1.0

NSQF Level: 5.5

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CSC/Q0410: Augmented Reality System Designer

Brief Job Description

AR System Designer is responsible for designing, maintaining, and evaluating the implementation for AR/VR projects. They ensure the proper usage of tools and delivery and also monitor the process during the testing and deployment phase

Personal Attributes

Designing augmented reality (AR) systems requires a combination of technical skills, creativity, and an understanding of user experience.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. <u>CSC/N0463</u>: Research & Understand user needs and support the procurement of equipment and material for AR setup.

2. <u>CSC/N0462</u>: Install and Configure AR tools and equipment to support the development of user interface.

- 3. CSC/N0464: Monitor and Manage AR projects
- 4. CSC/N1339: Collaboratively coordinate with the team
- 5. CSC/N0505: Follow health, safety and environment guidelines at workplace
- 6. DGT/VSQ/N0102: Employability Skills (60 Hours)

Qualification Pack (QP) Parameters

Sector	Capital Goods
Sub-Sector	Machine Tools, Dies, Moulds and Press Tools, Plastics Manufacturing Machinery, Textile Manufacturing Machinery, Process Plant Machinery, Electrical and Power Machinery, Light Engineering Goods, Defence Equipment, Fire-Fighting & Safety Equipment
Occupation	Design
Country	India









NSQF Level	5.5
Credits	19
Aligned to NCO/ISCO/ISIC Code	2166.0201
Minimum Educational Qualification & Experience	UG in relevant field (UG Degree in relevant field + 3 years of relevant experience or 3/ 4 years UG B,Sc,. BE, B.Tech (Electrical, Electronics, Mechanical, Mechatronics, Instrumentation and Control)* or 10+3 years Diploma in relevant field + 5 year of relevant experience or Previous NSQC level 5 + 1.5 years of relevant experience *Subject to being offered as 6 months internship/ project)
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	24 Years
Last Reviewed On	NA
Next Review Date	31/01/2027
NSQC Approval Date	31/01/2024
Version	1.0
Reference code on NQR	QG-5.5-CG-02045-2024-V1-CGSC
NQR Version	1









CSC/N0463: Research & Understand user needs and support the procurement of equipment and material for AR setup.

Description

This OS unit is about knowledge and skills to identify & select the required hardware, software and platform for AR setup.

Scope

The scope covers the following :

• Selecting the prerequisite technology for AR Setup

Elements and Performance Criteria

Procurement of Equipment and Material for AR setup

To be competent, the user/individual on the job must be able to:

- **PC1.** Demonstrate the ability to identify and evaluate potential vendors for augmented reality (AR) hardware and software.
- **PC2.** Evaluate vendors based on criteria such as product quality, reputation, pricing, and aftersales support.
- **PC3.** Successfully negotiate with vendors to obtain competitive prices for AR equipment and materials.
- **PC4.** Stay within the allocated budget for AR procurement without compromising on quality or functionality.
- **PC5.** Ensure that all procured AR equipment is compatible with existing systems and infrastructure.
- PC6. Verify technical specifications and compatibility to minimize integration challenges.
- **PC7.** Establish and implement quality assurance processes to verify the quality and reliability of procured AR equipment.
- **PC8.** Monitor and address any issues related to defective or substandard materials.
- **PC9.** Develop and adhere to a procurement timeline to ensure timely delivery of AR equipment.
- **PC10.** .Minimize delays by proactively addressing potential issues in the procurement process.
- **PC11.** Identify potential risks associated with the procurement process and develop mitigation strategies.
- **PC12.** Implement measures to minimize risks related to product defects, delays, or unforeseen complications.

Regulatory Compliance:

To be competent, the user/individual on the job must be able to:

- **PC13.** Ensure that all procured AR equipment complies with relevant industry standards and regulations.
- **PC14.** Stay informed about changes in regulations that may impact the procurement process.







- **PC15.** Maintain accurate records of all procurement transactions, including contracts, invoices, and communication with vendors.
- **PC16.** Provide regular reports to relevant stakeholders on the status of the procurement process.
- **PC17.** Evaluate the environmental impact of AR equipment and prioritize sustainable and ecofriendly options when feasible.
- **PC18.** Consider the life cycle of equipment and materials to minimize waste and support environmentally responsible practices.
- **PC19.** Communicate effectively with internal stakeholders to understand their requirements and expectations.
- **PC20.** Provide clear and timely updates on the progress of procurement activities, addressing any concerns or inquiries.
- **PC21.** Collaborate with vendors to ensure proper training and support for end-users after the procurement is complete.
- **PC22.** Address any issues that arise post-procurement promptly and effectively.
- **PC23.** Seek feedback from end-users and stakeholders to identify areas for improvement in the procurement process.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** the vision and motivations of the creative team (scriptwriter, director, setup designer among others)
- **KU2.** the target audience for the content and/or the organization/ individual that is commissioning the content
- **KU3.** setup limitations including details of shooting locations and any key constraints on budget, resources and time availability
- **KU4.** how to undertake research and collect relevant information to support setup concepts, ideas and scripts
- **KU5.** available setup techniques and implications for selecting a particular technique on resources, time and budget
- **KU6.** conceptual aspects like character design, set design and concept creation
- **KU7.** available sources of talent (cast and crews), their suitability for the setup and implications on time and budget
- **KU8.** available suppliers and service providers, their suitability for the setup and implications on time and budget
- **KU9.** how to prepare synopses, plot summaries, proposals, programme outlines and other written material for different audiences (e.g. financers, distributors, platforms etc.)
- **KU10.** how to prepare project proposals and presentations for potential investors/ financiers/ partners
- **KU11.** current issues, events, Capital coverage and any other factual information relating to the setup. (this is especially relevant for news, current affairs and other live programming e.g. radio)









- **KU12.** how various types of content can be monetized across platforms (e.g. satellite rights, syndication to other companies, digital capital etc.) and the applicability of these platforms to the setup
- **KU13.** how to check material (concepts, proposals, scripts etc.) for veracity, ethical concerns, copyright, legal issues and any other potential conflicts
- **KU14.** how to evaluate a setup concept for risks including those to the individuals own health and safety and of the setup cast and crew

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** prepare synopses, plot summaries, proposals, programme outlines and other written material for different audiences
- **GS2.** document the impact of selecting setup techniques, cast, crew, vendors and suppliers on the time, location and budget of the setup
- **GS3.** interpret the script and creative brief
- **GS4.** undertake background research, gather references and collect information
- **GS5.** understand the creative vision of the director/ script writer and producer
- **GS6.** understand the brief from the financer and any constraints/ limitations that affect the setup (e.g. time, people, materials, location, budget)
- **GS7.** communicate effectively with the entire setup unit, propose alternatives and agree on key decisions
- **GS8.** make relevant decisions related to the area of work e.g. choice of cast and crew, setup techniques, vendor selection etc.
- **GS9.** plan own work and work for the setup unit according to the requirements and agreed timelines
- **GS10.** manage within the agreed budget and minimize overruns
- **GS11.** the consumption patterns and preferences of the target audience (end user/viewer/ listener)
- **GS12.** identify any problems with successful execution of the task and resolve them in consultation with the relevant members of the setup unit
- **GS13.** how to assess the impact of selecting setup techniques, cast, crew, vendors and suppliers on the time, location and budget of the setup
- **GS14.** how to evaluate the revenue potential of a setup across platforms
- GS15. how to assess the suitability of setup concepts/ scripts for the intended target audience







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Procurement of Equipment and Material for AR setup	30	70	-	-
PC1. Demonstrate the ability to identify and evaluate potential vendors for augmented reality (AR) hardware and software.	-	-	-	-
PC2. Evaluate vendors based on criteria such as product quality, reputation, pricing, and after-sales support.	-	-	-	_
PC3. Successfully negotiate with vendors to obtain competitive prices for AR equipment and materials.	-	-	-	-
PC4. Stay within the allocated budget for AR procurement without compromising on quality or functionality.	-	-	-	-
PC5. Ensure that all procured AR equipment is compatible with existing systems and infrastructure.	-	-	-	-
PC6. Verify technical specifications and compatibility to minimize integration challenges.	-	-	-	-
PC7. Establish and implement quality assurance processes to verify the quality and reliability of procured AR equipment.	-	-	-	-
PC8. Monitor and address any issues related to defective or substandard materials.	-	-	-	-
PC9. Develop and adhere to a procurement timeline to ensure timely delivery of AR equipment.	-	-	-	-
PC10. .Minimize delays by proactively addressing potential issues in the procurement process.	-	-	-	-
PC11. Identify potential risks associated with the procurement process and develop mitigation strategies.	-	-	-	-
PC12. Implement measures to minimize risks related to product defects, delays, or unforeseen complications.	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Regulatory Compliance:	-	-	-	-
PC13. Ensure that all procured AR equipment complies with relevant industry standards and regulations.	-	-	-	-
PC14. Stay informed about changes in regulations that may impact the procurement process.	-	-	_	-
PC15. Maintain accurate records of all procurement transactions, including contracts, invoices, and communication with vendors.	-	-	-	-
PC16. Provide regular reports to relevant stakeholders on the status of the procurement process.	-	-	-	-
PC17. Evaluate the environmental impact of AR equipment and prioritize sustainable and eco-friendly options when feasible.	-	-	-	-
PC18. Consider the life cycle of equipment and materials to minimize waste and support environmentally responsible practices.	-	-	-	-
PC19. Communicate effectively with internal stakeholders to understand their requirements and expectations.	-	-	-	-
PC20. Provide clear and timely updates on the progress of procurement activities, addressing any concerns or inquiries.	-	-	_	-
PC21. Collaborate with vendors to ensure proper training and support for end-users after the procurement is complete.	-	-	-	-
PC22. Address any issues that arise post- procurement promptly and effectively.	-	-	_	-
PC23. Seek feedback from end-users and stakeholders to identify areas for improvement in the procurement process.	-	-	-	-
NOS Total	30	70	-	-







National Occupational Standards (NOS) Parameters

NOS Code	CSC/N0463
NOS Name	Research & Understand user needs and support the procurement of equipment and material for AR setup.
Sector	Capital Goods
Sub-Sector	Machine Tools, Dies, Moulds and Press Tools, Plastics Manufacturing Machinery, Textile Manufacturing Machinery, Process Plant Machinery, Electrical and Power Machinery, Light Engineering Goods, Defence Equipment
Occupation	Design, Service
NSQF Level	5.5
Credits	4
Version	1.0
Last Reviewed Date	31/01/2024
Next Review Date	31/01/2027
NSQC Clearance Date	31/01/2024







CSC/N0462: Install and Configure AR tools and equipment to support the development of user interface.

Description

This OS unit is about knowledge and skills to set up AR VR tools and preparing the environment for Augmented Reality (AR), Virtual Reality(VR), Mixed Reality (MR) content development by using external trackers, markers etc..

Scope

The scope covers the following :

- Prepare for the AR/ VR solution
- Apply the AR/ VR solution

Elements and Performance Criteria

Install and Configure AR tools and equipment to support the development of user interface.

To be competent, the user/individual on the job must be able to:

- **PC1.** Demonstrate proficiency in installing and configuring a variety of Augmented Reality (AR) hardware, including headsets, sensors, and cameras.
- **PC2.** Show expertise in setting up AR software platforms and applications for different use cases.
- **PC3.** install AR hardware components, ensuring proper calibration and alignment for optimal performance.
- PC4. Conduct thorough testing of AR devices to identify and resolve any hardware-related issues.
- **PC5.** Configure AR software systems, ensuring compatibility with different devices and platforms.
- PC6. Customize AR applications based on specific project requirements and end-user needs.
- PC7. Ensure reliable communication and data transfer between AR devices and backend systems.
- **PC8.** Perform accurate calibration and alignment of AR devices to enhance tracking precision and spatial awareness.
- **PC9.** Address calibration challenges to minimize tracking errors during AR experiences.
- **PC10.** Design and implement intuitive and user-friendly AR interfaces.
- **PC11.** Ensure that the UI meets usability standards and provides a seamless AR experience for end-users.
- PC12. .Demonstrate proficiency in troubleshooting AR system issues promptly and effectively.
- **PC13.** Use diagnostic tools to identify and resolve software or hardware malfunctions.
- **PC14.** Optimize AR system performance by fine-tuning settings and configurations.
- **PC15.** Identify and implement improvements to enhance the overall efficiency and responsiveness of AR applications.
- **PC16.** Implements security measures to protect AR systems from potential cyber threats.
- **PC17.** Integrate AR systems with existing network infrastructure seamlessly.
- **PC18.** Adheres to industry best practices for securing data transmitted and processed by AR tools.
- **PC19.** Maintain comprehensive documentation of installation and configuration processes.







- **PC20.** Provide clear and detailed reports on the status of AR systems, highlighting any issues or improvements made.
- **PC21.** Conduct training sessions for end-users on operating AR systems effectively.
- **PC22.** Ensure compliance with relevant industry standards and regulations in the installation and configuration of AR systems.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** the vision and motivations of the creative team (scriptwriter, director, setup designer among others)
- **KU2.** the target audience for the content and/or the organization/ individual that is commissioning the content
- **KU3.** setup limitations including details of shooting locations and any key constraints on budget, resources and time availability
- **KU4.** how to undertake research and collect relevant information to support setup concepts, ideas and scripts
- **KU5.** available setup techniques and implications for selecting a particular technique on resources, time and budget
- **KU6.** conceptual aspects like character design, set design and concept creation
- **KU7.** available sources of talent (cast and crews), their suitability for the setup and implications on time and budget
- **KU8.** available suppliers and service providers, their suitability for the setup and implications on time and budget
- **KU9.** how to prepare synopses, plot summaries, proposals, programme outlines and other written material for different audiences (e.g. financers, distributors, platforms etc.)
- **KU10.** how to prepare project proposals and presentations for potential investors/ financiers/ partners
- **KU11.** current issues, events, capital coverage and any other factual information relating to the setup (this is especially relevant for news, current affairs and other live programming e.g. radio)
- **KU12.** how various types of content can be monetized across platforms (e.g. satellite rights, syndication to other companies, digital capital etc.) and the applicability of these platforms to the setup
- **KU13.** how to check material (concepts, proposals, scripts etc.) for veracity, ethical concerns, copyright, legal issues and any other potential conflicts
- **KU14.** how to evaluate a setup concept for risks including those to the individuals own health and safety and of the setup cast and crew

Generic Skills (GS)

User/individual on the job needs to know how to:









- **GS1.** prepare synopses, plot summaries, proposals, programme outlines and other written material for different audiences
- **GS2.** document the impact of selecting setup techniques, cast, crew, vendors and suppliers on the time, location and budget of the setup
- **GS3.** interpret the script and creative brief
- **GS4.** undertake background research, gather references and collect information
- GS5. understand the creative vision of the director/ script writer and producer
- **GS6.** understand the brief from the financer and any constraints/ limitations that affect the setup (e.g. time, people, materials, location, budget)
- **GS7.** communicate effectively with the entire setup unit, propose alternatives and agree on key decisions
- **GS8.** make relevant decisions related to the area of work e.g. choice of cast and crew, setup techniques, vendor selection etc.
- **GS9.** plan own work and work for the setup unit according to the requirements and agreed timelines
- GS10. manage within the agreed budget and minimize overruns
- **GS11.** the consumption patterns and preferences of the target audience (end user/ viewer/ listener)
- **GS12.** identify any problems with successful execution of the task and resolve them in consultation with the relevant members of the setup unit
- **GS13.** how to assess the impact of selecting setup techniques, cast, crew, vendors and suppliers on the time, location and budget of the setup
- **GS14.** how to evaluate the revenue potential of a setup across platforms
- GS15. how to assess the suitability of setup concepts/ scripts for the intended target audience







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Install and Configure AR tools and equipment to support the development of user interface.</i>	30	70	-	-
PC1. Demonstrate proficiency in installing and configuring a variety of Augmented Reality (AR) hardware, including headsets, sensors, and cameras.	-	-	-	-
PC2. Show expertise in setting up AR software platforms and applications for different use cases.	-	-	-	-
PC3. install AR hardware components, ensuring proper calibration and alignment for optimal performance.	-	-	-	-
PC4. Conduct thorough testing of AR devices to identify and resolve any hardware-related issues.	-	-	-	-
PC5. Configure AR software systems, ensuring compatibility with different devices and platforms.	-	-	-	-
PC6. Customize AR applications based on specific project requirements and end-user needs.	-	-	-	-
PC7. Ensure reliable communication and data transfer between AR devices and backend systems.	-	-	-	-
PC8. Perform accurate calibration and alignment of AR devices to enhance tracking precision and spatial awareness.	_	-	-	_
PC9. Address calibration challenges to minimize tracking errors during AR experiences.	-	-	-	-
PC10. Design and implement intuitive and user-friendly AR interfaces.	_	-	-	-
PC11. Ensure that the UI meets usability standards and provides a seamless AR experience for endusers.	-	-	-	-
PC12. .Demonstrate proficiency in troubleshooting AR system issues promptly and effectively.	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. Use diagnostic tools to identify and resolve software or hardware malfunctions.	-	-	-	-
PC14. Optimize AR system performance by fine- tuning settings and configurations.	-	-	-	-
PC15. Identify and implement improvements to enhance the overall efficiency and responsiveness of AR applications.	-	-	-	-
PC16. Implements security measures to protect AR systems from potential cyber threats.	-	-	-	-
PC17. Integrate AR systems with existing network infrastructure seamlessly.	-	-	-	-
PC18. Adheres to industry best practices for securing data transmitted and processed by AR tools.	-	-	-	-
PC19. Maintain comprehensive documentation of installation and configuration processes.	-	-	-	-
PC20. Provide clear and detailed reports on the status of AR systems, highlighting any issues or improvements made.	-	-	-	-
PC21. Conduct training sessions for end-users on operating AR systems effectively.	-	-	-	-
PC22. Ensure compliance with relevant industry standards and regulations in the installation and configuration of AR systems.	-	-	-	-
NOS Total	30	70	-	-







National Occupational Standards (NOS) Parameters

NOS Code	CSC/N0462
NOS Name	Install and Configure AR tools and equipment to support the development of user interface.
Sector	Capital Goods
Sub-Sector	Machine Tools, Dies, Moulds and Press Tools, Plastics Manufacturing Machinery, Textile Manufacturing Machinery, Process Plant Machinery, Electrical and Power Machinery, Light Engineering Goods, Defence Equipment
Occupation	Design, Service
NSQF Level	5.5
Credits	5
Version	1.0
Last Reviewed Date	31/01/2024
Next Review Date	31/01/2027
NSQC Clearance Date	31/01/2024







CSC/N0464: Monitor and Manage AR projects

Description

The role of monitoring and managing Augmented Reality (AR) projects involves overseeing the planning, execution, and delivery of AR initiatives. This includes coordinating with cross-functional teams, managing project timelines and resources, and ensuring that AR applications meet quality standards. Additionally, monitoring and managing AR projects require staying updated with AR technologies and trends to drive innovation and maximize project success.

Scope

The scope covers the following :

• The scope of monitoring and managing Augmented Reality (AR) projects includes planning, resource management, stakeholder coordination, quality assurance, and risk management. This role involves staying updated with AR technologies, documenting project progress, providing training and support, and evaluating project success. Compliance with relevant laws and regulations is also essential.

Elements and Performance Criteria

Carry out monitoring and management of projects

To be competent, the user/individual on the job must be able to:

- **PC1.** Track system uptime and downtime to ensure the augmented reality (AR) system operates with high reliability.
- PC2. Assess the accuracy of AR object tracking and alignment with the physical environment.
- **PC3.** Optimize AR system performance for smooth user experience.
- **PC4.** Conduct usability testing and gather user feedback.
- **PC5.** Maintain high-quality visual and interactive AR content.
- **PC6.** Ensure AR applications are compatible with a range of devices and platforms.
- **PC7.** Implement robust security measures to protect AR data and user information.
- **PC8.** Design AR systems to scale efficiently with increasing user and content demands.
- **PC9.** Monitor project timelines for AR system development and updates.
- **PC10.** Measure end-user satisfaction with the implemented AR solutions.
- PC11. Ensure the AR system can adapt to emerging technologies and standards
- **PC12.** Provide comprehensive training materials and documentation for end-users and maintenance personnel.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the vision and motivations of the creative team (scriptwriter, director, setup designer among others)









- **KU2.** the target audience for the content and/or the organization/ individual that is commissioning the content
- **KU3.** setup limitations including details of shooting locations and any key constraints on budget, resources and time availability
- **KU4.** how to undertake research and collect relevant information to support setup concepts, ideas and scripts
- **KU5.** available setup techniques and implications for selecting a particular technique on resources, time and budget
- **KU6.** conceptual aspects like character design, set design and concept creation
- **KU7.** available sources of talent (cast and crews), their suitability for the setup and implications on time and budget
- **KU8.** available suppliers and service providers, their suitability for the setup and implications on time and budget
- **KU9.** how to prepare synopses, plot summaries, proposals, programme outlines and other written material for different audiences (e.g. financers, distributors, platforms etc.)
- **KU10.** how to prepare project proposals and presentations for potential investors/ financiers/ partners
- **KU11.** current issues, events, Capital coverage and any other factual information relating to the setup. (this is especially relevant for news, current affairs and other live programming e.g. radio)
- **KU12.** how various types of content can be monetized across platforms (e.g. satellite rights, syndication to other companies, digital capital etc.) and the applicability of these platforms to the setup
- **KU13.** how to check material (concepts, proposals, scripts etc.) for veracity, ethical concerns, copyright, legal issues and any other potential conflicts
- **KU14.** how to evaluate a setup concept for risks including those to the individuals own health and safety and of the setup cast and crew

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** prepare synopses, plot summaries, proposals, programme outlines and other written material for different audiences
- **GS2.** document the impact of selecting setup techniques, cast, crew, vendors and suppliers on the time, location and budget of the setup
- **GS3.** interpret the script and creative brief
- **GS4.** undertake background research, gather references and collect information
- **GS5.** understand the creative vision of the director/ script writer and producer
- **GS6.** understand the brief from the financer and any constraints/ limitations that affect the setup (e.g. time, people, materials, location, budget)
- **GS7.** communicate effectively with the entire setup unit, propose alternatives and agree on key decisions
- **GS8.** make relevant decisions related to the area of work e.g. choice of cast and crew, setup techniques, vendor selection etc.









- **GS9.** plan own work and work for the setup unit according to the requirements and agreed timelines
- **GS10.** manage within the agreed budget and minimize overruns
- GS11. the consumption patterns and preferences of the target audience (end user/viewer/ listener)
- **GS12.** identify any problems with successful execution of the task and resolve them in consultation with the relevant members of the setup unit
- **GS13.** how to assess the impact of selecting setup techniques, cast, crew, vendors and suppliers on the time, location and budget of the setup
- GS14. how to evaluate the revenue potential of a setup across platforms
- **GS15.** how to assess the suitability of setup concepts/ scripts for the intended target audience







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Carry out monitoring and management of projects	30	70	-	-
PC1. Track system uptime and downtime to ensure the augmented reality (AR) system operates with high reliability.	-	-	-	-
PC2. Assess the accuracy of AR object tracking and alignment with the physical environment.	-	-	-	-
PC3. Optimize AR system performance for smooth user experience.	-	-	-	-
PC4. Conduct usability testing and gather user feedback.	-	-	_	-
PC5. Maintain high-quality visual and interactive AR content.	-	-	-	-
PC6. Ensure AR applications are compatible with a range of devices and platforms.	-	-	-	-
PC7. Implement robust security measures to protect AR data and user information.	-	-	-	-
PC8. Design AR systems to scale efficiently with increasing user and content demands.	-	-	-	-
PC9. Monitor project timelines for AR system development and updates.	-	-	-	-
PC10. Measure end-user satisfaction with the implemented AR solutions.	-	-	-	-
PC11. Ensure the AR system can adapt to emerging technologies and standards	-	-	-	-
PC12. Provide comprehensive training materials and documentation for end-users and maintenance personnel.	-	-	-	-
NOS Total	30	70	-	-









National Occupational Standards (NOS) Parameters

NOS Code	CSC/N0464
NOS Name	Monitor and Manage AR projects
Sector	Capital Goods
Sub-Sector	Machine Tools, Dies, Moulds and Press Tools, Plastics Manufacturing Machinery, Textile Manufacturing Machinery, Process Plant Machinery, Electrical and Power Machinery, Light Engineering Goods, Defence Equipment
Occupation	Design, Service
NSQF Level	5.5
Credits	4
Version	1.0
Last Reviewed Date	31/01/2024
Next Review Date	31/01/2027
NSQC Clearance Date	31/01/2024







CSC/N1339: Collaboratively coordinate with the team

Description

This OS unit is about building relationships and working with people and groups inside and outside the organization, using skills and habits, to achieve the team goals and objectives

Scope

The scope covers the following :

- This unit/task covers the following:
- Creating team environment
- Communicating giving and receiving
- Working cooperatively
- Participating in team decision making
- Demonstrating Sense of Responsibility
- Showing respect for opinions, customs, and preferences

Elements and Performance Criteria

Communicate effectively at the workplace

To be competent, the user/individual on the job must be able to:

- **PC1.** exchange information and instruction with colleagues, and seek clarifications and feedback
- **PC2.** assist colleagues where required
- **PC3.** follow business communication etiquette in all interactions and communicative formats (online, digital, and in-person)
- **PC4.** document and share all relevant information with stakeholders in agreed formats and as per agreed timelines

Work effectively

To be competent, the user/individual on the job must be able to:

- PC5. identify and obtain clarity regarding organisational, team and own goals and targets
- **PC6.** prioritise and plan work in order to achieve goals and targets
- PC7. monitor own and team performance as per agreed plan
- PC8. complete duties accurately, systematically and within required timeframes
- **PC9.** express emotions appropriately at the workplace and manage own response to heightened emotions
- **PC10.** maintain orderliness and cleanliness in the work area Maintain and enhance professional competence
- PC11. identify own strengths and weaknesses in relation to goals and targets
- PC12. adapt self, service, or product to meet success criteria
- PC13. seek and select opportunities for continuous professional development
- PC14. formulate a professional development plan to enhance capabilities









- **PC15.** build or contribute to the organizational knowledge base of cases, clients, issues, solutions, and innovations
- PC16. examine developments and trends in field of work and their potential impact on work
- **PC17.** take feedback from peers, supervisors and clients to improve own performance and practices

Work in a disciplined and ethical manner

To be competent, the user/individual on the job must be able to:

- **PC18.** perform tasks as per workplace standards, organizational policies and legislative requirements
- **PC19.** display appropriate professional appearance at the workplace and adhere to the organizational dress code
- **PC20.** demonstrate responsible and disciplined behavior at the workplace such as punctuality; completing tasks as per given time and standards; demonstrating professional behavior at all times, adopting environment- friendly practices, etc.
- **PC21.** identify the cause of conflict and options for resolution with peers or escalate grievances and problems to appropriate authority as per procedure for conflict resolution
- **PC22.** protect the rights of the client and organization when delivering services
- **PC23.** ensure services are delivered equally to all clients regardless of personal and cultural beliefs
- **PC24.** operate within an agreed ethical code of practice and report unethical conduct to the appropriate authorities
- PC25. follow organizational guidelines and legal requirements on disclosure and confidentiality

Uphold social diversity at the workplace

To be competent, the user/individual on the job must be able to:

- **PC26.** recognize and evaluate biased practices against underrepresented groups like women and persons with disabilities, in workplace systems and processes
- **PC27.** identify and report discrimination and harassment based on gender, disability, or cultural difference at the workplace
- **PC28.** use inclusive or neutral language and gestures in all interactions
- PC29. respect the personal and professional space of others
- **PC30.** access grievance redressal mechanisms as per legislations

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** the organisation's policies and procedures for working with colleagues, roles and responsibilities
- **KU2.** the importance of effective communication and establishing good working relationships with colleagues
- **KU3.** different methods of communication and the circumstances in which it is appropriate to use these
- **KU4.** the importance of creating an environment of trust and mutual respect
- **KU5.** the implications of own work on the work and schedule of others
- **KU6.** different types of information that colleagues might need and the importance of providing this information when it is required







KU7. the importance of helping colleagues with problems, to meet quality and time standards as a team

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** read and write instructions, guidelines, procedures, messages, emails, and other media in language of the workplace
- **GS2.** communicate in common and technical terms in language of the workplace
- GS3. listen effectively and orally communicate information
- **GS4.** be punctual, do work scheduling and reporting
- GS5. comply with workplace practices and ethics
- **GS6.** maintain cleanliness and healthy environment
- **GS7.** be customer friendly understand real needs of the customer and suggest most appropriate solution
- **GS8.** be safety conscious and avoid risk
- **GS9.** be observant, vigilant, and security consciousness
- **GS10.** respond, handle problem, and escalate as necessary
- **GS11.** ask for clarification and advice from concerned persons
- **GS12.** make decisions on a suitable course of action or response keeping in view resource utilization while meeting commitments
- **GS13.** plan and organize work to achieve targets and deadlines







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Communicate effectively at the workplace	7	20	-	-
PC1. exchange information and instruction with colleagues, and seek clarifications and feedback	-	-	-	-
PC2. assist colleagues where required	-	-	-	-
PC3. follow business communication etiquette in all interactions and communicative formats (online, digital, and in-person)	-	-	-	-
PC4. document and share all relevant information with stakeholders in agreed formats and as per agreed timelines	-	-	-	-
Work effectively	7	20	-	-
PC5. identify and obtain clarity regarding organisational, team and own goals and targets	-	-	-	-
PC6. prioritise and plan work in order to achieve goals and targets	-	-	-	-
PC7. monitor own and team performance as per agreed plan	-	-	-	-
PC8. complete duties accurately, systematically and within required timeframes	-	-	-	-
PC9. express emotions appropriately at the workplace and manage own response to heightened emotions	-	-	-	-
PC10. maintain orderliness and cleanliness in the work area Maintain and enhance professional competence	-	-	-	-
PC11. identify own strengths and weaknesses in relation to goals and targets	-	-	-	-
PC12. adapt self, service, or product to meet success criteria	-	-	-	-
PC13. seek and select opportunities for continuous professional development	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. formulate a professional development plan to enhance capabilities	-	-	-	-
PC15. build or contribute to the organizational knowledge base of cases, clients, issues, solutions, and innovations	-	-	-	-
PC16. examine developments and trends in field of work and their potential impact on work	-	-	-	-
PC17. take feedback from peers, supervisors and clients to improve own performance and practices	-	-	-	-
Work in a disciplined and ethical manner	8	20	-	-
PC18. perform tasks as per workplace standards, organizational policies and legislative requirements	-	-	-	-
PC19. display appropriate professional appearance at the workplace and adhere to the organizational dress code	-	-	-	-
PC20. demonstrate responsible and disciplined behavior at the workplace such as punctuality; completing tasks as per given time and standards; demonstrating professional behavior at all times, adopting environment- friendly practices, etc.	-	-	-	-
PC21. identify the cause of conflict and options for resolution with peers or escalate grievances and problems to appropriate authority as per procedure for conflict resolution	-	-	-	-
PC22. protect the rights of the client and organization when delivering services	-	-	-	-
PC23. ensure services are delivered equally to all clients regardless of personal and cultural beliefs	-	-	-	-
PC24. operate within an agreed ethical code of practice and report unethical conduct to the appropriate authorities	-	-	-	-
PC25. follow organizational guidelines and legal requirements on disclosure and confidentiality	-	-	-	-
Uphold social diversity at the workplace	8	10	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC26. recognize and evaluate biased practices against underrepresented groups like women and persons with disabilities, in workplace systems and processes	-	-	-	-
PC27. identify and report discrimination and harassment based on gender, disability, or cultural difference at the workplace	-	-	-	-
PC28. use inclusive or neutral language and gestures in all interactions	-	-	-	-
PC29. respect the personal and professional space of others	-	-	-	-
PC30. access grievance redressal mechanisms as per legislations	-	-	-	-
NOS Total	30	70	-	-









National Occupational Standards (NOS) Parameters

NOS Code	CSC/N1339
NOS Name	Collaboratively coordinate with the team
Sector	Capital Goods
Sub-Sector	Generic
Occupation	Generic
NSQF Level	5
Credits	3
Version	1.0
Last Reviewed Date	31/01/2024
Next Review Date	31/01/2027
NSQC Clearance Date	31/01/2024







CSC/N0505: Follow health, safety and environment guidelines at workplace

Description

This OS unit is about following adequate safety procedures to make work environment healthy and safe

Scope

The scope covers the following :

- This unit/task covers the following:
- Adhere to standard safety procedures of the company
- Follow healthy practices and posture
- Practice waste management and recycling
- Conserve material and resources

Elements and Performance Criteria

Adhere to standard safety procedures of the organisation

To be competent, the user/individual on the job must be able to:

- **PC1.** comply with general safety procedures and those for handling equipment, tools, chemicals, and hazardous material, as prescribed and followed in the organisation
- **PC2.** remove finger rings or any other metal objects likely to interfere with the work
- **PC3.** ensure that identification badge or any other object worn around the neck or on the clothing does not get caught in any rotating machine, or otherwise interfere with the work
- **PC4.** use appropriate safety devices such as goggles, gloves, ear plugs, caps, ESD pins, covers, shoes, helmets etc. recommended for the work being performed
- **PC5.** inform, escalate, or raise alarm about any suspicions, unaccounted hazardous material, devices, or other objects found in the premises
- **PC6.** inform, escalate, or raise alarm about any breach of safety or security procedure in the organisation
- **PC7.** help achieve zero accidents goals at work
- **PC8.** avoid damage to sensitive electronic components due to negligence of ESD procedures
- **PC9.** participate regularly in fire drills or other safety related workshops organised by the organisation
- **PC10.** follow strictly all access control and perimeter safety procedures in designated factory areas such as robotic work stations, automated production lines, automated material movement and other potentially risky operations
- **PC11.** ensure that other people follow all access control and perimeter safety procedures in designated factory areas and help avoid accidents
- **PC12.** use emergency switches or other mechanisms of stopping a machine immediately in case any emergency situation has developed or about to happen
- PC13. ensure that electrical equipment are properly grounded
- PC14. follow Cyber Security guidelines and be vigilant at workplace









PC15. proceed to designated safe assembly area immediately on hearing fire alarm

Follow healthy practices and posture

To be competent, the user/individual on the job must be able to:

- PC16. wash hands and use sanitizers as recommended to prevent spread of diseases
- PC17. follow common personal hygiene practices
- **PC18.** maintain appropriate posture, especially in long hours of sitting or standing position and in handling heavy materials
- **PC19.** participate in company organised health sessions such as exercises, games, yoga, physiotherapy, and other activities
- **PC20.** handle heavy and hazardous materials with care, while maintaining appropriate posture, using suitable tools, and handling equipment such as trolleys, jacks, and ladders
- PC21. learn and apply first aid devices available in the workplace
- PC22. learn and apply safety and handling procedures for electrical shock and electrocution
- PC23. learn and apply emergency medical help services
- PC24. follow workplace decorum and avoid emotional outbursts or inappropriate language
- PC25. prevent any harassment at workplace

Practice waste management and recycling

To be competent, the user/individual on the job must be able to:

- **PC26.** identify recyclable, non-recyclable, and hazardous waste generated in the workplace and comply with their disposal procedures
- PC27. dispose non-recyclable waste and hazardous waste following recommended processes
- PC28. deposit recyclable and reusable material at identified locations
- PC29. support education and compliance of waste management processes

Conserve material and resources

To be competent, the user/individual on the job must be able to:

- **PC30.** identify ways to optimize usage of material and resources such as water, electricity, energy in various tasks, activities, and processes
- **PC31.** check for spills and leakages of material in various tasks, activities, and processes and plug them
- PC32. escalate the leakage issue to appropriate authority if needed
- **PC33.** carry out routine cleaning of tools, machines, and equipment and maintain them in good working condition to optimize efficiency and wastage
- **PC34.** check if the equipment is functioning normally before commencing work and rectify or report any malfunctioning to the responsible agency
- PC35. check for any odour, sparks, fumes, emission, unusual vibration, noise, or any other objectionable presence in the environment and take immediate corrective action followed by report to responsible agency
- **PC36.** ensure electrical equipment are properly connected for use and are switched off when not in use
- PC37. support education and compliance of resource conservation processes

Knowledge and Understanding (KU)









The individual on the job needs to know and understand:

- KU1. company policies on workplace, environment, and personnel management
- KU2. company policy on occupational safety and health
- KU3. professional hazards related to nature of work and how to deal with them
- KU4. how to maintain the work area safe and secure
- KU5. how to handle hazardous materials, tools, and equipment
- **KU6.** emergency procedures for fire, electrocution, physical injury, wounds, etc.
- **KU7.** need for proper body posture and use of appropriate handling equipment
- **KU8.** understand electrical grounding practices
- KU9. common sources of pollution and ways to minimize it
- KU10. waste management categorisation, colour coding, handling, and disposal procedure
- **KU11.** organisation policies and procedures for minimizing waste
- KU12. efficient use of electricity, material, and water in processes
- **KU13.** organization policies regarding network usage and security
- KU14. norms for professional behaviour at workplace and dealing with deviations

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** communicating in the language of the workplace
- GS2. reading and interpreting documents, drawings, symbols, and instructions
- **GS3.** operating computer and common office equipment and diagnosing common electrical and interconnection problems
- GS4. writing notes, reports, observations, emails
- **GS5.** using personnel protective devices
- **GS6.** maintaining clean and healthy work environment
- GS7. using and operating safety devices and equipment
- GS8. conducting work following workplace security processes and rules
- GS9. responding to emergency situations pertaining to workplace
- **GS10.** understanding people and collaborating to create a healthy workplace







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Adhere to standard safety procedures of the organisation	7	10	-	-
PC1. comply with general safety procedures and those for handling equipment, tools, chemicals, and hazardous material, as prescribed and followed in the organisation	-	-	-	-
PC2. remove finger rings or any other metal objects likely to interfere with the work	-	-	-	-
PC3. ensure that identification badge or any other object worn around the neck or on the clothing does not get caught in any rotating machine, or otherwise interfere with the work	-	-	-	-
PC4. use appropriate safety devices such as goggles, gloves, ear plugs, caps, ESD pins, covers, shoes, helmets etc. recommended for the work being performed	-	-	-	-
PC5. inform, escalate, or raise alarm about any suspicions, unaccounted hazardous material, devices, or other objects found in the premises	-	-	-	-
PC6. inform, escalate, or raise alarm about any breach of safety or security procedure in the organisation	-	-	-	-
PC7. help achieve zero accidents goals at work	-	-	-	-
PC8. avoid damage to sensitive electronic components due to negligence of ESD procedures	-	-	-	-
PC9. participate regularly in fire drills or other safety related workshops organised by the organisation	-	-	-	-
PC10. follow strictly all access control and perimeter safety procedures in designated factory areas such as robotic work stations, automated production lines, automated material movement and other potentially risky operations	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. ensure that other people follow all access control and perimeter safety procedures in designated factory areas and help avoid accidents	-	-	-	-
PC12. use emergency switches or other mechanisms of stopping a machine immediately in case any emergency situation has developed or about to happen	-	-	-	-
PC13. ensure that electrical equipment are properly grounded	-	_	-	-
PC14. follow Cyber Security guidelines and be vigilant at workplace	-	-	-	-
PC15. proceed to designated safe assembly area immediately on hearing fire alarm	-	-	-	-
Follow healthy practices and posture	8	10	-	-
PC16. wash hands and use sanitizers as recommended to prevent spread of diseases	-	-	-	-
PC17. follow common personal hygiene practices	-	-	-	-
PC18. maintain appropriate posture, especially in long hours of sitting or standing position and in handling heavy materials	-	-	-	-
PC19. participate in company organised health sessions such as exercises, games, yoga, physiotherapy, and other activities	-	-	-	-
PC20. handle heavy and hazardous materials with care, while maintaining appropriate posture, using suitable tools, and handling equipment such as trolleys, jacks, and ladders	-	-	-	-
PC21. learn and apply first aid devices available in the workplace	-	-	-	-
PC22. learn and apply safety and handling procedures for electrical shock and electrocution	_	-	_	-
PC23. learn and apply emergency medical help services	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC24. follow workplace decorum and avoid emotional outbursts or inappropriate language	-	-	-	-
PC25. prevent any harassment at workplace	-	-	-	-
Practice waste management and recycling	-	-	-	-
PC26. identify recyclable, non-recyclable, and hazardous waste generated in the workplace and comply with their disposal procedures	-	-	-	-
PC27. dispose non-recyclable waste and hazardous waste following recommended processes	-	-	-	-
PC28. deposit recyclable and reusable material at identified locations	-	-	-	-
PC29. support education and compliance of waste management processes	-	-	-	-
Conserve material and resources	-	-	-	-
PC30. identify ways to optimize usage of material and resources such as water, electricity, energy in various tasks, activities, and processes	-	-	-	-
PC31. check for spills and leakages of material in various tasks, activities, and processes and plug them	-	-	-	-
PC32. escalate the leakage issue to appropriate authority if needed	-	-	-	-
PC33. carry out routine cleaning of tools, machines, and equipment and maintain them in good working condition to optimize efficiency and wastage	-	-	-	_
PC34. check if the equipment is functioning normally before commencing work and rectify or report any malfunctioning to the responsible agency	-	-	-	-
PC35. check for any odour, sparks, fumes, emission, unusual vibration, noise, or any other objectionable presence in the environment and take immediate corrective action followed by report to responsible agency	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC36. ensure electrical equipment are properly connected for use and are switched off when not in use	_	-	_	-
PC37. support education and compliance of resource conservation processes	-	-	-	-
NOS Total	15	20	-	-







National Occupational Standards (NOS) Parameters

NOS Code	CSC/N0505
NOS Name	Follow health, safety and environment guidelines at workplace
Sector	Capital Goods
Sub-Sector	Machine Tools, Dies, Moulds and Press Tools, Plastics Manufacturing Machinery, Textile Manufacturing Machinery, Process Plant Machinery, Electrical and Power Machinery, Defence Equipment, Fire-Fighting & Safety Equipment, Homeland Security
Occupation	Service
NSQF Level	5
Credits	1
Version	1.0
Last Reviewed Date	31/01/2024
Next Review Date	31/01/2027
NSQC Clearance Date	31/01/2024







DGT/VSQ/N0102: Employability Skills (60 Hours)

Description

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

Scope

The scope covers the following :

- Introduction to Employability Skills
- Constitutional values Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Career Development & Goal Setting
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

Elements and Performance Criteria

Introduction to Employability Skills

To be competent, the user/individual on the job must be able to:

- PC1. identify employability skills required for jobs in various industries
- PC2. identify and explore learning and employability portals

Constitutional values - Citizenship

To be competent, the user/individual on the job must be able to:

- **PC3.** recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.
- PC4. follow environmentally sustainable practices

Becoming a Professional in the 21st Century

To be competent, the user/individual on the job must be able to:

- PC5. recognize the significance of 21st Century Skills for employment
- **PC6.** practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life

Basic English Skills

To be competent, the user/individual on the job must be able to:









- **PC7.** use basic English for everyday conversation in different contexts, in person and over the telephone
- **PC8.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- PC9. write short messages, notes, letters, e-mails etc. in English

Career Development & Goal Setting

To be competent, the user/individual on the job must be able to:

- PC10. understand the difference between job and career
- **PC11.** prepare a career development plan with short- and long-term goals, based on aptitude

Communication Skills

To be competent, the user/individual on the job must be able to:

- **PC12.** follow verbal and non-verbal communication etiquette and active listening techniques in various settings
- PC13. work collaboratively with others in a team

Diversity & Inclusion

To be competent, the user/individual on the job must be able to:

- PC14. communicate and behave appropriately with all genders and PwD
- PC15. escalate any issues related to sexual harassment at workplace according to POSH Act

Financial and Legal Literacy

To be competent, the user/individual on the job must be able to:

- PC16. select financial institutions, products and services as per requirement
- PC17. carry out offline and online financial transactions, safely and securely
- **PC18.** identify common components of salary and compute income, expenses, taxes, investments etc
- **PC19.** identify relevant rights and laws and use legal aids to fight against legal exploitation *Essential Digital Skills*

To be competent, the user/individual on the job must be able to:

- PC20. operate digital devices and carry out basic internet operations securely and safely
- PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively
- PC22. use basic features of word processor, spreadsheets, and presentations

Entrepreneurship

To be competent, the user/individual on the job must be able to:

- **PC23.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- **PC24.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- **PC25.** identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

Customer Service

To be competent, the user/individual on the job must be able to:

- **PC26.** identify different types of customers
- **PC27.** identify and respond to customer requests and needs in a professional manner.









PC28. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

To be competent, the user/individual on the job must be able to:

- PC29. create a professional Curriculum vitae (Résumé)
- **PC30.** search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively
- PC31. apply to identified job openings using offline /online methods as per requirement
- **PC32.** answer questions politely, with clarity and confidence, during recruitment and selection
- PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. need for employability skills and different learning and employability related portals
- KU2. various constitutional and personal values
- KU3. different environmentally sustainable practices and their importance
- KU4. Twenty first (21st) century skills and their importance
- **KU5.** how to use English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up
- KU6. importance of career development and setting long- and short-term goals
- **KU7.** about effective communication
- KU8. POSH Act
- KU9. Gender sensitivity and inclusivity
- KU10. different types of financial institutes, products, and services
- **KU11.** how to compute income and expenditure
- KU12. importance of maintaining safety and security in offline and online financial transactions
- KU13. different legal rights and laws
- KU14. different types of digital devices and the procedure to operate them safely and securely
- **KU15.** how to create and operate an e- mail account and use applications such as word processors, spreadsheets etc.
- KU16. how to identify business opportunities
- KU17. types and needs of customers
- KU18. how to apply for a job and prepare for an interview
- KU19. apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. read and write different types of documents/instructions/correspondence
- GS2. communicate effectively using appropriate language in formal and informal settings









- GS3. behave politely and appropriately with all
- **GS4.** how to work in a virtual mode
- GS5. perform calculations efficiently
- **GS6.** solve problems effectively
- **GS7.** pay attention to details
- **GS8.** manage time efficiently
- GS9. maintain hygiene and sanitization to avoid infection







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
PC1. identify employability skills required for jobs in various industries	_	-	-	-
PC2. identify and explore learning and employability portals	-	-	-	-
Constitutional values – Citizenship	1	1	-	-
PC3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
PC4. follow environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	2	4	-	-
PC5. recognize the significance of 21st Century Skills for employment	-	-	-	-
PC6. practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	_	_	-	-
Basic English Skills	2	3	-	-
PC7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
PC9. write short messages, notes, letters, e-mails etc. in English	_	-	-	-
Career Development & Goal Setting	1	2	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. understand the difference between job and career	-	-	-	_
PC11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
Communication Skills	2	2	-	-
PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
PC13. work collaboratively with others in a team	-	-	-	-
Diversity & Inclusion	1	2	-	-
PC14. communicate and behave appropriately with all genders and PwD	-	-	-	_
PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
Financial and Legal Literacy	2	3	-	-
PC16. select financial institutions, products and services as per requirement	-	-	-	-
PC17. carry out offline and online financial transactions, safely and securely	-	-	-	_
PC18. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
Essential Digital Skills	3	4	-	-
PC20. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	_
PC22. use basic features of word processor, spreadsheets, and presentations	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Entrepreneurship	2	3	-	-
PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	_
PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
Customer Service	1	2	-	-
PC26. identify different types of customers	-	-	-	-
PC27. identify and respond to customer requests and needs in a professional manner.	-	-	-	-
PC28. follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	2	3	-	-
PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
PC31. apply to identified job openings using offline /online methods as per requirement	-	-	-	-
PC32. answer questions politely, with clarity and confidence, during recruitment and selection	_	-	_	-
PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
NOS Total	20	30	-	-









National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0102
NOS Name	Employability Skills (60 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	4
Credits	2
Version	1.0
Last Reviewed Date	30/11/2023
Next Review Date	29/11/2026
NSQC Clearance Date	30/11/2023

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down the proportion of marks for Theory and Skills Practical for each PC.

2. The assessment for the theory part will be based on the knowledge bank of questions created by the SSC.

3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.

4. Individual assessment agencies will create unique question papers for the theory part for each candidate at each examination/training centre (as per assessment criteria below).

5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training centre based on these criteria.

6. To pass the Qualification Pack assessment, every trainee should score a minimum of 70% of %







aggregate marks to successfully clear the assessment.

7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

Minimum Aggregate Passing % at QP Level : 70

(**Please note**: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
CSC/N0463.Research & Understand user needs and support the procurement of equipment and material for AR setup.	30	70	0	0	100	15
CSC/N0462.Install and Configure AR tools and equipment to support the development of user interface.	30	70	0	0	100	15
CSC/N0464.Monitor and Manage AR projects	30	70	0	0	100	24
CSC/N1339.Collaboratively coordinate with the team	30	70	-	-	100	15
CSC/N0505.Follow health, safety and environment guidelines at workplace	15	20	-	-	35	18
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	13
Total	155	330	-	-	485	100







Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training







Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.









Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.